

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: 10/520,655  
Source: PGT/10  
Date Processed by STIC: 8/22/05

# ***ENTERED***



PCT

## RAW SEQUENCE LISTING

DATE: 08/22/2005

PATENT APPLICATION: US/10/520,655

TIME: 17:05:00

Input Set : A:\PTO.KD.txt

Output Set: N:\CRF4\08222005\J520655.raw

3 <110> APPLICANT: COMMISSARIAT A L'ENERGIE ATOMIQUE  
 4 CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE  
 5 DIDEBERG Otto  
 6 VERNET Thierry  
 7 MOUZ Nicolas  
 9 <120> TITLE OF INVENTION: STREPTOCOCCUS PNEUMONIAE PBP2x MINI-PROTEIN AND USES  
 THEREOF.  
 11 <130> FILE REFERENCE: F263FR79s  
 C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/520,655  
 C--> 14 <141> CURRENT FILING DATE: 2005-01-10  
 16 <160> NUMBER OF SEQ ID NOS: 9  
 18 <170> SOFTWARE: PatentIn Ver. 2.1  
 20 <210> SEQ ID NO: 1  
 21 <211> LENGTH: 551  
 22 <212> TYPE: PRT  
 23 <213> ORGANISM: Streptococcus pneumoniae  
 25 <400> SEQUENCE: 1  
 26 Gly Ser Gly Ala Lys Arg Gly Thr Ile Tyr Asp Arg Asn Gly Val Pro  
 27 1 5 10 15  
 29 Ile Ala Glu Asp Ala Thr Ser Gly Gly Pro Asn Arg Ser Tyr Pro Asn  
 30 20 25 30  
 32 Gly Gln Phe Ala Ser Ser Phe Ile Gly Gly Gly Met Glu Ser Ser Leu  
 33 35 40 45  
 35 Asn Ser Ile Leu Ala Gly Gly Gly Asp Gly Lys Asp Val Tyr Thr  
 36 50 55 60  
 38 Thr Ile Ser Ser Pro Leu Gln Ser Phe Met Glu Thr Gln Met Asp Ala  
 39 65 70 75 80  
 41 Phe Gln Glu Lys Val Lys Gly Lys Tyr Met Thr Ala Thr Leu Val Ser  
 42 85 90 95  
 44 Ala Lys Thr Gly Glu Ile Leu Ala Thr Thr Gln Arg Pro Thr Phe Asp  
 45 100 105 110  
 47 Ala Asp Thr Lys Glu Gly Ile Thr Glu Asp Phe Val Trp Arg Asp Ile  
 48 115 120 125  
 50 Leu Tyr Gln Ser Asn Tyr Glu Pro Gly Ser Thr Met Lys Val Met Met  
 51 130 135 140  
 53 Leu Ala Ala Ala Ile Asp Asn Asn Thr Phe Pro Gly Gly Glu Val Phe  
 54 145 150 155 160  
 56 Asn Ser Ser Glu Leu Lys Ile Ala Asp Ala Thr Ile Arg Asp Trp Asp  
 57 165 170 175  
 59 Val Asn Glu Gly Leu Thr Gly Gly Arg Thr Met Thr Phe Ser Gln Gly  
 60 180 185 190  
 62 Phe Ala His Ser Ser Asn Val Gly Met Thr Leu Leu Glu Gln Lys Met  
 63 195 200 205  
 65 Gly Asp Ala Thr Trp Leu Asp Tyr Leu Asn Arg Phe Lys Phe Gly Val

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66      210      215      220
68 Pro Thr Arg Phe Gly Leu Thr Asp Glu Tyr Ala Gly Gln Leu Pro Ala
69 225      230      235      240
71 Asp Asn Ile Val Asn Ile Ala Gln Ser Ser Phe Gly Gln Gly Ile Ser
72      245      250      255
74 Val Thr Gln Thr Gln Met Ile Arg Ala Phe Thr Ala Ile Ala Asn Asp
75      260      265      270
77 Gly Val Met Leu Glu Pro Lys Phe Ile Ser Ala Ile Tyr Asp Pro Asn
78      275      280      285
80 Asp Gln Thr Ala Arg Lys Ser Gln Lys Glu Ile Val Gly Asn Pro Val
81      290      295      300
83 Ser Lys Asp Ala Ala Ser Leu Thr Arg Thr Asn Met Val Leu Val Gly
84 305      310      315      320
86 Thr Asp Pro Val Tyr Gly Thr Met Tyr Asn His Ser Thr Gly Lys Pro
87      325      330      335
89 Thr Val Thr Val Pro Gly Gln Asn Val Ala Leu Lys Ser Gly Thr Ala
90      340      345      350
92 Gln Ile Ala Asp Glu Lys Asn Gly Gly Tyr Leu Val Gly Leu Thr Asp
93      355      360      365
95 Tyr Ile Phe Ser Ala Val Ser Met Ser Pro Ala Glu Asn Pro Asp Phe
96      370      375      380
98 Ile Leu Tyr Val Thr Val Gln Gln Pro Glu His Tyr Ser Gly Ile Gln
99 385      390      395      400
101 Leu Gly Glu Phe Ala Asn Pro Ile Leu Glu Arg Ala Ser Ala Met Lys
102      405      410      415
104 Asp Ser Leu Asn Leu Gln Thr Thr Ala Lys Ala Leu Glu Gln Val Ser
105      420      425      430
107 Gln Gln Ser Pro Tyr Pro Met Pro Ser Val Lys Asp Ile Ser Pro Gly
108      435      440      445
110 Asp Leu Ala Glu Glu Leu Arg Asn Leu Val Gln Pro Ile Val Val
111      450      455      460
113 Gly Thr Gly Thr Lys Ile Lys Asn Ser Ser Ala Glu Glu Gly Lys Asn
114 465      470      475      480
116 Leu Ala Pro Asn Gln Gln Val Leu Ile Leu Ser Asp Lys Ala Glu Glu
117      485      490      495
119 Val Pro Asp Met Tyr Gly Trp Thr Lys Glu Thr Ala Glu Thr Leu Ala
120      500      505      510
122 Lys Trp Leu Asn Ile Glu Leu Glu Phe Gln Gly Ser Gly Ser Thr Val
123      515      520      525
126 Gln Lys Gln Asp Val Arg Ala Asn Thr Ala Ile Lys Asp Ile Lys Lys
127      530      535      540
129 Ile Thr Leu Thr Leu Gly Asp
130 545      550
134 <210> SEQ ID NO: 2
135 <211> LENGTH: 46
136 <212> TYPE: DNA
137 <213> ORGANISM: Artificial sequence
139 <220> FEATURE:
140 <223> OTHER INFORMATION: Description of the artificial sequence:primer

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142 <400> SEQUENCE: 2
143 gtcgacttag tctcctaaag ttaatttaat ttttttaatg tttttg          46
146 <210> SEQ ID NO: 3
147 <211> LENGTH: 21
148 <212> TYPE: DNA
149 <213> ORGANISM: Artificial sequence
151 <220> FEATURE:
152 <223> OTHER INFORMATION: Description of the artificial sequence:primer
154 <400> SEQUENCE: 3
155 ggatccggga caggcactcg c          21
158 <210> SEQ ID NO: 4
159 <211> LENGTH: 43
160 <212> TYPE: DNA
161 <213> ORGANISM: Artificial sequence
163 <220> FEATURE:
164 <223> OTHER INFORMATION: Description of the artificial sequence:primer
166 <400> SEQUENCE: 4
167 cataaatagt cccacgtttg gccccggatc cacgcggaac cag          43
170 <210> SEQ ID NO: 5
171 <211> LENGTH: 51
172 <212> TYPE: DNA
173 <213> ORGANISM: Artificial sequence
175 <220> FEATURE:
176 <223> OTHER INFORMATION: Description of the artificial sequence:primer
178 <400> SEQUENCE: 5
179 gtttgggtaa ctacgattgg gacctccaga ggttgcatcc tcagcaatcg g          51
182 <210> SEQ ID NO: 6
183 <211> LENGTH: 48
184 <212> TYPE: DNA
185 <213> ORGANISM: Artificial sequence
187 <220> FEATURE:
188 <223> OTHER INFORMATION: Description of the artificial sequence:primer
190 <400> SEQUENCE: 6
191 gttcaaggaa ctctccattc caccgcgatg aaaactagaa gcaaattg          48
194 <210> SEQ ID NO: 7
195 <211> LENGTH: 49
196 <212> TYPE: DNA
197 <213> ORGANISM: Artificial sequence
199 <220> FEATURE:
200 <223> OTHER INFORMATION: Description of the artificial sequence:primer
202 <400> SEQUENCE: 7
203 tgtataaaca tccttaccgt cccacacctc ccctgcaaga atactgttc          49
206 <210> SEQ ID NO: 8
207 <211> LENGTH: 30
208 <212> TYPE: DNA
209 <213> ORGANISM: Artificial sequence
211 <220> FEATURE:
212 <223> OTHER INFORMATION: Description of the artificial sequence:primer
214 <400> SEQUENCE: 8

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215 ccgcatatgg ccaaacgtgg gactatttat 30  
218 <210> SEQ ID NO: 9  
219 <211> LENGTH: 32  
220 <212> TYPE: DNA  
221 <213> ORGANISM: Artificial sequence  
223 <220> FEATURE:  
224 <223> OTHER INFORMATION: Description of the artificial s,quence:primer  
226 <400> SEQUENCE: 9  
227 ggctcgagtt agtctcctaa agttaatgta at 32

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/520,655

DATE: 08/22/2005

TIME: 17:05:01

Input Set : A:\PTO.KD.txt

Output Set: N:\CRF4\08222005\J520655.raw

L:13 M:270 C: Current Application Number differs, Replaced Application Number

L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date